

**CLAIMS**

1. A wireless transceiver comprising:

5 at least one base band unit;

at least one radio frequency unit; and

10 a wireless link for wirelessly coupling the baseband unit with the radio frequency unit.

2. The wireless transceiver of Claim 1, wherein at least one of the base band unit and the radio frequency unit comprises a transmitter-receiver  
15 for supporting the wireless link.

3. The wireless transceiver of Claim 2, wherein the transmitter-receiver comprises at least one of a line-of-sight transceiver and a broadcast  
20 transceiver.

4. The wireless transceiver of Claim 2, wherein the transmitter-receiver comprises at least one of:

25 a demultiplexer for demultiplexing a received signal and a multiplexer for multiplexing a signal to be transmitted;

an authenticator for authenticating the received signal and an deauthenticator for deauthenticating the signal to be transmitted; and

5 a decryptor for decrypting the received signal and an encryptor for encrypting the signal to be transmitted.

10 5. The wireless transceiver of Claim 2, wherein the at least one base band unit comprises a multi-headed air interface antenna for supporting the wireless link.

15 6. The wireless transceiver of Claim 5, wherein the multi-headed air interface antenna comprises at least one antenna head per sector.

20 7. The wireless transceiver of Claim 5, wherein the multi-headed air interface antenna is operative to support a data rate of at least 100 Mbps.

8. The wireless transceiver of Claim 2, wherein the at least one radio frequency unit comprises an RF antenna for supporting the wireless link.

25 9. The wireless transceiver of Claim 7, wherein the RF antenna is operative to support a data rate of at least 100 Mbps.

**10.** The wireless transceiver of Claim 2, wherein the at least one base band unit comprises:

5           at least two base band unit printed circuit boards; and

          a base band unit wireless link for wirelessly coupling the at least two base band unit printed circuit boards to each other.

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**11.** The wireless transceiver of Claim 10, wherein the base band unit wireless link comprises a range of at least 500 meters.

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**12.** The wireless transceiver of Claim 2, wherein the at least one radio frequency unit comprises:

          at least two radio frequency unit printed circuit boards; and

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          a radio frequency wireless link for wirelessly coupling the at least two radio frequency unit printed circuit boards to each other.

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**13.** The wireless transceiver of Claim 12, wherein the radio frequency wireless link comprises a range of at least 500 meters.

**14.** A base transceiver station comprising:

at least one base band unit;

at least one radio frequency unit having at least one radio; and

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a wireless link for wirelessly coupling the baseband unit with the at least one radio.

10      15.    The base transceiver station of Claim 14, wherein the wireless link wirelessly couples at least one of an IF section, an I&Q section, and an RF section of the radio with the at least one base band unit.

15      16.    The base transceiver station of Claim 14, wherein at least one of the base band unit and the radio comprises a transmitter-receiver for supporting the wireless link.

20      17.    The base transceiver station of Claim 16, wherein the transmitter-receiver comprises at least one of a line-of-sight transceiver and a broadcast transceiver.

25      18.    The base transceiver station of Claim 16, wherein the transmitter-receiver comprises at least one of:

a demultiplexer for demultiplexing a received signal and a multiplexer for multiplexing a signal to be transmitted;

an authenticator for authenticating the received signal and an deauthenticator for deauthenticating the signal to be transmitted; and

a decryptor for decrypting the received signal and an encryptor for encrypting the signal to be transmitted.

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19. The base transceiver station of Claim 16, wherein the at least one base band unit comprises a multi-headed air interface antenna for supporting the wireless link, the multi-headed air interface antenna having at least one antenna head per sector and operative to support a data rate of at least 100 Mbps.

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20. The base transceiver station of Claim 16, wherein the at least one radio comprises an RF antenna for supporting the wireless link, the RF antenna operative to support a data rate of at least 100 Mbps.

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